WELD 160 Welding Blueprint Reading

Credit Hours: 2

Scheduled hours per week

Lecture: 2
Lab: 0
Other: 0

Catalog Course Description: Fundamentals of blueprint reading geared towards teaching students to decipher blueprints found in industrial settings.

Prerequisites: None

Corequisites: None

Course learning Outcomes:

A. determine how the designer intends the part to be built
B. determine the bills of material costs and specifications
C. recognize how much detailing is required for the shop use
D. know how to display the views based on the design drawings
E. make selections of weld symbols and their locations

Topics to be studied:

A. mirror image, top, side and bottom views
B. the American Welding Society (AWS) welding symbols
C. the American Institute of Steel Construction (AISC) code
D. the International Standards Organization (ISO) symbols

Relationship of course to program outcomes:

Students will be proficient with “hands-on” skills in all welding possesses (SMAW,GTAW, FCAW, GMAW)	x
80% of all students will pass ASME welding test on plate 2G,3G and 4G positions and or 6G pipe test	x
Students will be able to perform destructive testing and recognize whether it passes or fails and also the daily functions of a (CWI)	x
Student will know the technology terminology used in the welding industry	x
Students will be able to demonstrate the ability to work ethically, effectively, and respectively with people of diverse backgrounds and with people who have different roles, social affiliations, and personalities.	x

**Place an X by all the general education competencies met in this course.*

This course meets the following General Education Outcome(s):	
Composition and Rhetoric Students illustrate a fundamental understanding of the best practices of communicating in English and meet the writing standards of their college or program-based communication requirements.	
Science & Technology Students successfully apply systematic methods of analysis to the natural and physical world, understand scientific knowledge as empirical, and refer to data as a basis for conclusions.	
Mathematics & Quantitative Skills Students effectively use quantitative techniques and the practical application of numerical, symbolic, or spatial concepts.	x
Society, Diversity, & Connections Students demonstrate understanding of and a logical ability to successfully analyze human behavior, societal and political organization, or communication.	
Human Inquiry & the Past Students interpret historical events or philosophical perspectives by identifying patterns, applying analytical reasoning, employing methods of critical inquiry, or expanding problem-solving skills.	
The Arts & Creativity Students successfully articulate and apply methods and principles of critical and creative inquiry to the production or analysis of works of art.	
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Special projects or requirements of the course:
Drawings and sketches and mock weldments
Surveys of industrial drawings
Making bills of materials and determining weights and economizing cutting lists

Additional information:
None

Assessment of Outcomes Outcomes will be measured by testing (quizzes and final)

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